

URGENT PLEA FOR TISSUE DONORS

Donors are vital if pets are to continue to receive life-changing therapy.

And, the Veterinary Tissue Bank (VTB) - the first of its kind to be established in Europe and the UK - is keen to encourage pet owners, especially cat owners (where there is a shortage of donors) to register their pets as donors.

The organisation - founded by veterinary surgeons, Dr Peter Myint and John Innes - aims to improve the quality of lives of injured pets by providing bone and tissue grafts for orthopaedic veterinary surgeons to use. The bone and soft tissue is sourced from deceased donor pets.

Mirroring the same principles as human tissue donation, the ethical donor programme allows owners to donate their deceased pets' soft tissue and bone so it can be supplied to veterinary professionals throughout the UK and Europe to use for

allograft procedures to help potentially, thousands of cats and dogs in need of bone grafting surgery to repair injuries such as fractures and ligament ruptures.

Unfortunately, as in human tissue donation, the programme is experiencing a donor shortage in feline tissue. A single donor can help as many as 30 other pets.

There's no charge for owners who wish to donate their pets' tissues and once tissues have been retrieved VTB arranges a cremation and, if requested, can then return the pets' ashes to the owners.

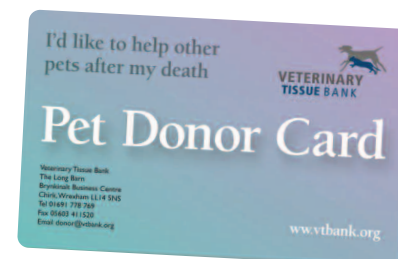
Dr Peter Myint said: "We are currently experiencing a desperate shortage of cat donors and are hoping that cat owners willing to donate tissues will register and then carry a pet donor card. Many feline patients are waiting for bone grafts for months.

We then write to their veterinary practice to request that this registration be stored

on the pet's medical record. In this way, it can often be easier to have the 'difficult' conversation when the pet passes away.

We hope owners will find comfort at their time of bereavement from the knowledge that they are able to help others in need through their gift of tissue donation."

All potential donors are screened to make sure they meet a strict selection criteria; which requires that they have a full medical history and record of recent vaccinations and pets must not have died of any infectious diseases or cancer or have been carrying a virus at the time of death.



For more information contact VTB on **01691 778769** or visit the website at **vtbank.org**.



DONOR TALES

October 2014



STEM CELL THERAPY IS PROVING EFFECTIVE IN EASING ARTHRITIS PAIN

Stem cell therapy is still relatively new in the UK but is already making a significant improvement to the lives of arthritic pets.

Coming under the heading of regenerative medicine - a broad definition for innovative medical therapies that enable the body to repair, replace, restore and regenerate damaged or diseased tissues, stem cell therapy uses a concentrated form of autologous adult stem cells, derived from either fat tissue or bone marrow, to treat traumatic and degenerative diseases ranging from osteoarthritis to tendon and ligament injuries.

Despite being in its infancy, regenerative medicine is not new. Success in numerous animal models of disease and emerging success in human clinical trials in the USA support the rationale for stem cell use.

John Innes, formerly Professor of Small Animal Surgery at University of Liverpool Veterinary School and now CVS Referral

Director based and practising at ChesterGates Referral Hospital in Chester has active research programmes in this area and the initiative which, ultimately, aims to help dogs and cats with severe injuries, tendon damage, or fractures that are difficult to heal by traditional methods.

This ground breaking process of stem cell therapy involves isolating cells from the patient either by way of harvesting fat from under the skin of the host pet in a small surgical procedure - the sample is then transported to Veterinary Tissue Bank - Europe's first tissue bank for veterinary surgeons - where the stem cells are extracted and expanded in cell culture and then returned for injection by the veterinary surgeon in to the patient's injured tissue or joint.

The cells used are autologous (from the patient) and because the vet is using the pet's own cells, there is no risk of rejection.

John Innes explains: "This is a pioneering treatment which emerging evidence suggests can reduce inflammation and pain in arthritic joints, or be used to stimulate bone healing in fractures that are slow to heal.

"By expanding the cell numbers in culture, we can inject many millions of stem cells as opposed to just a few thousand which is the number achieved by simply extracting the cells from fat and injecting them straight back in. So, in theory, we have much greater chances of success."

John believes the procedure may improve a pet's prognosis in some cases where more acceptable treatments are not appropriate: "Although it can't cure arthritis, this treatment can alleviate the pain in some cases. Also, in the case of fractures, there are occasions when they may fail to heal or in instances where pets are unlikely to recover fully from major surgery, here stem cell therapy may be appropriate."

COCKER SPANIEL IS ONE OF THE FIRST DOGS IN THE UK TO BENEFIT FROM STEM CELL THERAPY FOR HER ARTHRITIS



Janet Purser from Timperley in Cheshire is the owner of one of the first pets in the UK to benefit from stem cell therapy.

Her 10 year-old black, Cocker Spaniel, Lottie was suffering from chronic arthritis in all four legs to the extent that her dog was reluctant to exercise or play as it caused such extreme pain.

Janet asked her veterinary practice to refer her to John Innes at ChesterGates as she was already aware of John's pioneering work in the field of orthopaedics and believed that he would know any new options that were available to Lottie. Janet didn't have to wait very long for their appointment and it was then

that John told Janet about stem cell therapy and she agreed to the surgery.

Lottie first went into Chester Gates to have her stem cells harvested. This was a simple procedure where adipose tissue (fat cells) were removed from Lottie's flank. The adipose tissue was then sent to the lab at Veterinary Tissue Bank, where the stem cells were isolated, and then grown to make more stem cells. A few weeks later and Lottie's stem cells had multiplied in millions enough to have them re-injected back into her joints.



Surgery at Chester Gates Animal Hospital

John conducted the simple procedure of injecting cells into Lottie's joints. Lottie had both her elbows and both her hips treated. Janet explains: "It was a straight-forward procedure, Lottie only had to stay at ChesterGates for a couple of hours then she was able to return home.

Janet had to keep Lottie quiet for 10 days in order to let the stem cells adhere to the joint.

"By the end of the second week Lottie was showing real improvement and by the end of the third week she had stopped limping altogether. It was like a miracle," Janet said.

"I have been trying to keep her quiet and maintain a gentle exercise regime but it hasn't been easy. Lottie is so giddy and just wants to play"

"Her limping is a thing of the past. I am overjoyed to have my fun dog back once more. She is even giving my other dog, Molly, who is just four years old, a run for her money. She beat her to the ball the other day." Janet is delighted with the outcome.

MEG ALSO RECEIVED STEM CELL THERAPY FOR ARTHRITIS WHEN ALL OTHER TREATMENTS FAILED TO EASE HER PAIN



Meg – an eight year-old Labrador cross – from Retford in Nottinghamshire

suffered from chronic arthritis in her front elbow joints to the extent that she was reluctant to exercise or play as it caused such extreme pain.

Helen Dakin, her owner, was despairing of ever finding an effective treatment for her dog's arthritis, after traditional treatment with anti-inflammatories failed to improve her condition.

Helen was referred to Beechwood Veterinary Hospital in Doncaster, where clinical director, Mark Straw B.Vet.Med CertSAS MRCVS, took CT scans of Meg's arthritic joints and after considerable investigation of her condition, recommended the stem cell therapy. Mark explains:

Meg's treatment costs were covered by her Marks & Spencer pet insurance cover which was a relief to Helen. She said: "Poor Meg has suffered more than her fair share of problems and we are committed to giving her the best chance in life to make up for her awful start in life."

Helen took on Meg from an animal rescue shelter aged 12 weeks. She had been found in a starving condition and was suspected of being used as bait by a dog fighting ring.

Meg first went to have her stem cells harvested. A couple of weeks later

and Meg's stem cells had multiplied enough to have them re-injected back into her joints.

Mark conducted the simple procedure of injecting cells into Meg's joints. She had both her elbows treated. Helen explains: "It was a straight-forward procedure and she only had to stay in hospital for a couple of hours then she was able to return home.

Helen had to keep Meg quiet for 10 days in order to let the stem cells adhere to the joint. She said:

"Mark worked miracles with her. By the end of the second week Meg was showing real improvement and although she still limps slightly she is keen to go for a walk now which signifies a huge reduction in the pain as it was a real struggle prior to the therapy to get her to walk even as far as the end of the road."

